

ABSTRACT

An optical control system receives an incident light wave containing a plurality of wavelength components and is capable of giving different spatial light intensity distributions respectively to the wavelength components and of easily changing the color characteristic of an outgoing light wave. The optical control system is applied to illumination systems and light sources for displays, and to a method and an apparatus for process control using such modulated light. The optical control system receives a linearly polarized light wave as an incident light wave 1 containing a plurality of wavelength components, gives different polarization plane rotation angles respectively to the wavelength components by a wavelength dispersion azimuth rotator 3, gives the plane of polarization of the incident light wave 1 an optional optical rotation angle spatial distribution by a spatial light modulator 5, and emit an outgoing light wave containing wavelength components respectively having different spatial light intensity distributions by an analyzer 7.